# ISETIA PMIS
# Case Study

CFG Metro Project - Altunizade - Çamlıca - Bosna Bulvarı **Metro Line**

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## Project Overview

The **Altunizade - Çamlıca - Bosna Bulvarı Metro Line** (CFG Metro), also known as Line M14, is a high-profile urban transit project in Istanbul, Turkey. The 4.5 km-long underground metro line consists of 4 strategically located stations and is designed to serve approximately 300,000 passengers daily.

It links densely populated and culturally significant zones, including the Çamlıca Mosque, Altunizade, and Bosna Bulvarı, and integrates with existing lines such as Marmaray and Metrobus.

T.C. ULAŞTIRMA VE ALTYAPI BAKANLIĞI | AYGM | emay

CFG METRO ÇELİKLER · FERNAS · GÜR YAPI ADİ ORTAKLIĞI | ALPKON

## Project Participants

| | |
|---|---|
| INVESTOR / OWNER : | **AYGM (General Directorate of Infrastructure Investments)** |
| DESIGNER : | **ALPKON Engineering** |
| PMC : | **EMAY International Engineering & Consulting** |
| CONTRACTOR JV : | **Çelikler İnşaat, Fernas İnşaat, Gür Yapı (CFG JV)** |

## Metro Project Characteristics & Challenges

• **Metro projects** are among the most complex infrastructure developments, requiring the coordination of hundreds of disciplines - including civil, structural, geotechnical, MEP, signaling, telecom, architectural, and systems integration.

• **They involve underground** construction in dense urban environments, often under live roads, utilities, and historical sites - which brings engineering, logistical, and safety challenges.

• **The interface between** stations, tunnels, and shafts, along with 24/7 site constraints, demands precise scheduling, just-in-time delivery, and proactive risk management.

• **Metro lines require** integration with existing transport infrastructure, utilities, and city masterplans, making stakeholder engagement and real-time data coordination essential.

• **Managing a metro project** is not just construction - it's about creating a synchronized ecosystem of design, procurement, civil works, electromechanical systems, rolling stock, and commissioning.

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## Why Metro Projects Are Important

Metro systems are a backbone of urban mobility, enabling millions of citizens to commute safely, quickly, and affordably.

They help cities reduce traffic congestion, minimize carbon emissions, and support sustainable development goals (SDGs).

Investing in metro lines contributes to economic growth, increases property value, and connects underserved communities to job and service hubs.

Modern metro systems also foster technological innovation, from BIM and automation to smart ticketing and AI-driven maintenance.

## Benefits of Metro Projects

Provide predictable, high-capacity transportation in fast-growing cities.

Improve urban resilience by offering alternative modes during traffic crises or natural disasters.

Create thousands of direct and indirect jobs during design, construction, and operation.

Act as a catalyst for smart city transformation, integrating with real-time data platforms, IoT, and digital twins.

Promote inclusive urban development, bridging the gap between city centers and peripheries.

## Why ISETIA Was Selected?

The CFG Metro Project required a modern and integrated platform that could meet stringent requirements for BIM, schedule control, document management, and digital communication. After a rigorous evaluation of over 10 global solutions, **ISETIA was selected** as the preferred platform for its **holistic and unified capabilities.**

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## Key Reasons for Selection

1. Fully compliant with **ISO 19650 BIM standards**
2. A **true Common Data Environment (CDE)** that includes:
    - *BIM Model Management (3D/4D/5D)*
    - *Document Management System (DMS)*
    - *Integrated Project Scheduling (CPM)*
    - *Progress & Analytics Dashboard*
3. Unified **platform for communication**, reducing dependency on email or third-party tools
4. High configurability, mobile access, and real-time collaboration

## ISETIA's Benefits to the Project

- Reduced document retrieval time by **over 10%**
- Cut down meetings to understand project status **by 50%**
- Enabled **site-based progress updates** directly from mobile devices
- **Digitized Quality** (NCR, RFI) and HSE (NM, IR) processes
- Improved design **coordination and change tracking**
- Enhanced collaboration across JV partners with **standardized reporting**
- Centralized control over schedule, cost, documents, and visual progress in **one platform**

**Yakup Dulkadir – BIM Manager:**

*"ISETIA is our daily go-to system. We use it extensively for 4D and 5D project management — our site progress updates are automatically linked to the schedule and BIM model, which gives us a live view of the project. Before ISETIA, we were using multiple tools: BIM software just for viewing, Excel for quantity take-off, a separate scheduler, and a 4D simulator. Now, everything from data entry, planning, control, analytics, and reporting happens within a single, user-friendly interface. Our team is fully satisfied and confident in using ISETIA."*

# Voices from the Project

**Ender Erol – JV Representative, Contractor Team:**

*"Metro projects are inherently complex — both vertically and horizontally. It's crucial to monitor quality, safety, and multi-disciplinary coordination. ISETIA helped us digitize all our processes: NCRs, RFIs, HSE forms — all can be entered from the site via mobile. We can collaborate with designers, report to the client, coordinate with the PMC, and track subcontractors all within one system. Material waste was significantly reduced because we can now track procurement status and material approvals more efficiently. As JV members from different companies, we used to prepare separate reports. Now, with ISETIA's standardized reporting, all stakeholders receive the same real-time data in a consistent format. This has streamlined communication immensely."*

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**Mustafa Murteza – Project Manager, EMAY (PMC):**

*"We investigated more than 10 of the most popular BIM-based systems. ISETIA stood out by offering features that normally require three to four different platforms combined. It's not just an EDMS — ISETIA provides ISO 19650 compliance, integrated BIM, document management, and scheduling. As the PMC, we now have full visibility over design and construction activities in real time. All our official correspondence is carried out via ISETIA, ensuring complete transparency across all stakeholders. Thanks to ISETIA, we spend 10% less time searching for documents or strategic information, and we've cut our coordination meetings in half."*

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## Conclusion

The CFG Metro Project sets a new benchmark for metro infrastructure projects in Turkey, not only for its engineering complexity but also for its **digital project delivery** using ISETIA. The system enabled seamless coordination, real-time visibility, reduced waste, and faster decision-making - making it the digital backbone of the project.

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